(RESEARCH ARTICLE)

Effect of laughing therapy on level of depression among elderly

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Abstract

The early recognition and management of depression in the elderly in old age homes using the healthcare resources help to return them to a happier and more fulfilling life. This study investigated the effect of laughing therapy on level of depression among the elderly in selected old age homes in Thiruvananthapuram. The objectives of the study were to assess the level of depression among elderly and to find out the effect of laughing therapy on level of depression among elderly. The third objective was to find out the association of pre-test level of depression among elderly and selected demographic variables. The study was based on J.W.Kenny's Open System Model. The research design of this study is Quasi experimental two group pre-test-post-test design. The sample consisted of 60 elderly residing in old age homes Thiruvananthapuram district. Purposive sampling was used. The instruments used in this study were the Modified Yesavage Geriatric Depression Scale and demographic proforma. The participants in the treatment group involved in laughing therapy for 30 minutes each day for 7 consecutive days and those in the control group were monitored for depression. A pre-test was given before administering the laughing therapy and a post-test was performed after 1 week. The findings revealed that in experimental group 60% had mild depression and 40% had moderate depression and in control group 46.7% had mild depression and 53.3% had moderate depression. The laughing therapy given to elderly residing in old age homes had significantly reduced their level of depression ($p < 0.01$) and also there was significant association between level of depression and gender and educational status. Laughing therapy is an innovative option to promote a healthy environment for elderly.

Keywords: Laughing Therapy; Depression; Elderly; Old Age Homes

1. Introduction

The aging population is a growing concern worldwide [1,2], with an increasing number of elderly individuals residing in old age homes[3]. One of the significant challenges faced by this demographic is the prevalence of depression [5,6], which can have debilitating effects on their mental and physical health [4,7]. Depression in older adults can lead to reduced quality of life, increased risk of chronic diseases, and even mortality [8,9]. Therefore, it is essential to explore innovative and accessible interventions to mitigate depression in this population[10].

Laughter therapy, a non-pharmacological approach,[11,12] has gained attention in recent years for its potential to improve mental health outcomes.[13] This therapy involves the use of humor and playful activities to stimulate laughter, which has been shown to reduce stress, anxiety, and depression.[14] The benefits of laughter therapy are multifaceted, including the release of endorphins, social connection, and improved mood.[15,16]

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Despite the growing evidence supporting the effectiveness of laughter therapy, there is a scarcity of research focusing on its impact on depression among the elderly in old age homes [17,18]. This study aims to address this knowledge gap by investigating the effect of laughing therapy on the level of depression among elderly residents in old age homes.

By exploring the potential benefits of laughter therapy, this research seeks to contribute to the development of evidence-based interventions that can improve the mental health and well-being of older adults in institutional care settings. The findings of this study will provide valuable insights for healthcare professionals, caregivers, and policymakers to inform the implementation of laughter therapy programs in old age homes.

1.1. Statement of the problem

A study to assess the effect of laughing therapy on level of depression among elderly in selected old age homes in Thiruvananthapuram district

Objectives of the study were:

- To assess level of depression among elderly in experimental and control group.
- To assess the level of depression among elderly after implementing laughing therapy.
- To find out the effect of laughing therapy on level of depression among elderly.
- To find out association of pre-test level of depression among elderly and selected demographic variables.

1.2. Hypotheses

The hypotheses were tested at 0.05 level of significance

- H1i: There is significant difference in mean depression scores before and after laughing therapy among experimental group.
- H1ii: There is significant difference in mean post-test depression scores among experimental and control group.
- H1iii: There is significant association between level of depression of elderly with selected demographic variables.
- PURPOSE: - To reduce depression among elderly who are staying in selected old age homes in Thiruvananthapuram with the help of laughing therapy.
- POPULATION: - Elderly with depression living in old age homes in Thiruvananthapuram district
- SAMPLE: - 30 elderly in the experimental group and 30 in the control group
- SAMPLING TECHNIQUE: - Purposive Sampling Technique
- RESEARCH APPROACH: - Experimental approach
- RESEARCH DESIGN: - Quasi experimental design
- DATA ANALYSIS: - Descriptive and Inferential statistics
- TOOL: - Demographic Proforma, Modified Yesavage Geriatric Depression Scale and Laughing therapy

Table 1 Mean, standard deviation and paired 't' value of level of depression of elderly before and after laughing therapy (N=60)

Group		Mean	SD	df	Mean difference	Paired 't'	p
Experimental	Pre test	15.4	3.3	29	4.6	13.1 **	0.000
	Post test	10.8	3.4				
Control	Pre test	16.6	3.4	29	2.5	6.16**	0.000
	Post test	19.1	3.8				

Table 2 Mean, standard deviation and t value of level of depression of elderly between experimental and control group (N=60)

Group		Mean	SD	df	Paired 't'	p
Experimental	Pre test	15.4	3.3	58	1.46	0.150
	Post test	16.6	3.4			
Control	Pre test	10.8	3.4	58	9.02**	0.000
	Post test	19.1	3.8			

** Significant at 0.01 level

2. Results and discussion

Results of the present study are discussed under the following headings:

- Section 1: Description of sample characteristics.
- Section 2: Level of depression.
- Section 3: Effect of laughing therapy on depression among elderly.
- Section 4: Association between level of depression and selected demographic variables.

2.1. Section 1: Description of sample characteristics

- Based on the gender, in experimental group, 63.3% of samples were females and in control group, 66.7% samples were females.
- Majority of samples belonged to hindu religion, 80% in experimental group and 93.3% in control group.
- According to marital status, 46.7% in experimental group and 40% in control group were widow/widower. A minority of samples 3.3%, were divorced in both experimental and control group.
- Based on number of children, 46.7% in experimental group and 53.3% in control group had no children.
- Regarding the type of family, 76.7% in experimental group and a majority of samples 96.7% in control group belonged to extended family.
- Based on educational status, in experimental group 43.3% had secondary education whereas in control group 53.3% had primary education.
- Regarding previous occupation, in experimental group 46.7% were government employed whereas in control group 33.3% were self-employed.
- Based on family support, 63.3% samples in experimental group have adequate family support while 70.0% of samples in control group have inadequate family support.
- Regarding duration of stay in old age home, 46.7% of samples in experimental group and half of samples (50%) in control group had been staying in old age home for less than 2 years.
- According to diseases of samples, 43.3% in experimental group and 53.3% in control group had hypertension.
- Regarding drugs taken by samples, 70.0% of samples in experimental group and 83.3% of samples in control group were taking drugs.
- Based on availability of their own home before reaching old age home, 53.3% of samples in experimental group had their own home whereas 76.7% of samples in control group did'nt have their own home before reaching old age home.
- Based on the visitors, 73.3% of samples in experimental group had visitors while 53.3% of samples in control group had no visitors.
- According to person visits the samples, out of total samples half of samples (50.0%) were visited by their other blood relatives, in both experimental and control group.
- Based on the frequency of visits by the visitors, 54.5% of samples in experimental group and 85.7% in control group were visited occasionally.

2.2. Section 2: Level of depression among elderly

The study revealed that in experimental group 60% had mild depression and 40% had moderate depression. In control group 46.7% had mild depression and 53.3% had moderate depression.

2.3. Section 3: Effect of laughing therapy on depression among elderly

It was found that the average depression score among the experimental group before laughing therapy was 15.4 ± 3.3 and that among control group was 16.6 ± 3.4. After the laughing therapy, among the experimental group depression score reduced to 10.8 ± 3.4 and in control group it increased to 19.1 ± 3.8. The mean difference between pre-test and post-test among experimental group was 4.6 and that in control group was -2.5. The t value 13.1 ($p < 0.01$) in experimental group and t value 6.16 ($p < 0.01$) in control group shows statistical significance. Therefore, it is interpreted that laughing therapy is effective and H1i is accepted.

The mean post-test depression score in experimental group is 10.8 and that in control group is 19.1. There is significant reduction in mean depression score of elderly in experimental group as compared to that in control group at 0.01 level. Hence H1ii was accepted

2.4. Section 4: Association between level of depression and selected demographic variables.

Chi square test and Fisher's Exact test were done to find out association between level of depression and selected demographic variables. There was significant association between level of depression and gender ($\chi 2 = 4.25$) and educational status ($\chi 2 = 6.8$). There was no association between level of depression and other selected demographic variables.

3. Conclusion

The incidence of depression increased among elderly. The individuals with depression suppress their negative emotions and will not disclose it to others. Laughing has beneficial effects on depression in elderly by free from negative emotions. Laughing therapy was found to be effective as there was reduction in depression scores after the intervention. Analysis shows that in pre-test, in experimental group 60.0% had mild depression and 40.0% had moderate depression. In control group 46.7% had mild depression and 53.3% had moderate depression. In posttest, in experimental group 46.7% elders were normal, 50.0% had mild depression, 3.3% had moderate depression and in control group 3.3% were normal, 16.7% had mild depression, 70.0% had moderate depression and 10.0% had severe depression.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

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